multiple patient populations at different locations, and further, the common template being used to generate a matrix that includes a plurality of possible post-test diagnostic outcomes, each outcome indicating a possible disease and probability for the disease; [includes a matrix of a plurality of independent input variables coupled with a plurality of outcomes for each input variable, and still further, each outcome being evidence-based from prior diagnoses taken from patient populations;] and further,

(b) [providing a plurality of patient symptoms and information as input variables;] creating each post-test outcome in the matrix from an array of mathematical factors that are based on patient symptoms and information, with one of the factors being a pre-test odds factor, and with the other factors in the array being input as independent variables that indicate the likelihood of an outcome based on certain diagnostic tests, with the number of independent variables in the array being infinitely scalable to allow the addition or deletion of independent variables over time as evidence-based data is accrued, and wherein the factors in the array are multiplied together to produce the post-test diagnostic outcome;

[(c) using the statistically accrued evidence-based outcomes from the input variables to generate a plurality of disease categories that are related to the symptoms indicated in step b;] and

[(d)] (c) reporting [a series of possible diagnoses and probabilities for each diagnosis that is made immediately available] the possible post-test outcomes to a

user as a list of diagnostic probabilities ranked from the most likely to the least likely of possible diagnoses for a patient.

2. (cancelled)

3. (cancelled)

4. (cancelled)

5. (cancelled)

6. (cancelled)

7. (cancelled)

8. (amended) The process of claim 1, including:

creating each independent input variable [providing a ranked probability for multiple diagnoses from the multiple input variables] by using an algorithm that generates a unique [at least one] likelihood ratio for each independent input variable, for estimating [the probability of each diagnosis] a weighted contribution to each diagnosis.

9. (amended) The process of claim 8, wherein the [probability of each diagnosis] pre-test odds factor for each post-test outcome is determined prior to conducting a patient examination for a particular disease and redetermined following the actual outcome of the patient examination, [thereby incorporating relevant information in the form of a linked succession of likelihood ratios from the examination into the post-examination calculation] by using the information from the patient examination.

10. (amended) The process of claim 8, including multiplying a chain of likelihood ratios with the pre-test odds factor to produce a product that refines the accuracy of [ranked probabilities] the pre-test odds factor.